

WHAT I CLAIM AS MY INVENTION IS:

1. A light polarizing device comprising:  
a polarizing element having an optically transparent substrate, an environmentally sensitive polarizing element on the substrate, and a sealed enclosure surrounding the polarizing element, the enclosure having a non-reactive atmosphere to protect the polarizing element from the ambient environment.
2. The light polarizing device of claim 1 in which the polarizing element is a wire-grid polarizing element.
3. A light polarizing device comprising:  
an optically transparent substrate, an environmentally sensitive polarizing element on the substrate, an optically transparent cover sheet, a plurality of spacers distributed around the periphery of the device and supporting the cover sheet on the substrate above the element, sealant extending around the periphery of the device between the substrate and the cover sheet, and non-reactive atmosphere filling the interior space between the substrate and the cover sheet and protecting the environmentally sensitive polarizing element.
4. The light polarizing device of claim 3 in which the polarizing element is a wire-grid polarizing element.
5. A sealable housing for use in a sub-assembly for a display device, the sealable housing comprising mounting apertures for optical elements.
6. The sealable housing of claim 5 comprised of triangular top and bottom portions and three face portions extending between the top and bottom portions to form a wedge-shaped enclosure, one of the mounting apertures for optical elements located in each of the face portions.

7. The sealable housing of claim 6 in which the top and bottom portions are right triangles each having two short sides and a long side, respectively.

8. A sub-assembly for a display device comprising a sealable housing 40 having first, second and third mounting apertures, a light polarizing element having an environmentally sensitive active surface, the light polarizing element sealed into the first aperture, a light modulator panel sealed into the second aperture and a lens sealed into the third aperture.

9. The sub-assembly of claim 8 in which the sealable housing comprises triangular top and bottom portions and first, second and third rectangular face portions extending between the top and bottom portions to form a wedge-shaped enclosure, the first, second and third mounting apertures being located in the first, second and third rectangular face portions, respectively.

10. The sub-assembly of claim 9 in which the top and bottom portions are right-triangles having two short sides and a long side, and the first face portion extends between the long sides of the top and bottom portions.

11. The sub-assembly of claim 10 in which the polarizing element is a wire-grid polarizer.

12. The sub-assembly of claim 8 in which the light modulator panel is a reflective liquid crystal light modulator panel.

13. The sub-assembly of claim 8 in which the lens is a projection lens.